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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/687,436	10/13/2000	Alan H. Karp	10992795	8480

7590 12/17/2004  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P. O. Box 272400  
fort Collins, CO 80527-2400

EXAMINER

VO, LILIAN

ART UNIT	PAPER NUMBER
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2127

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/687,436

Applicant(s)

KARP ET AL.

Examiner

Lilian Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 September 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5 - 15, 18, 19, 22 - 24 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 16, 17, 20, 21, 25 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

1. Claims 1 – 26 are pending.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 5, 7, 9, 11 – 15, 18, 19 and 22 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephen Mounsey ("Disk Quotas", University of Cambridge, Dept. of Engineer, October 9, 1997, hereinafter Mounsey) in view of Kyler et al. (US 6,092,163, hereinafter Kyler).

1. Regarding **claim 1**, Mounsey discloses a method for flexible allocation of a resource, comprising the steps of:

associating a soft limit and a hard limit to a potential user of the resource wherein the soft limit guarantees access to the resource by the potential user and the hard limit enables the potential user to exceed the soft limit on a first-come-first-served basis (1<sup>st</sup> paragraph);

obtaining a request for allocation of a portion of the resource for the potential user (1<sup>st</sup> paragraph);

granting the request if the request if allowed would not exceed the soft limit of the potential user (1<sup>st</sup> paragraph: default initial limit);

denying the request if the request if allowed would exceed the hard limit of the potential user (1<sup>st</sup> paragraph: Exceeding the hard limit results in immediate failure of all further file creation or expansion).

Mounsey did not clearly disclose the step denying the request if the request if allowed would cause a grand total allocation of the resource for plural users to exceed a high watermark assigned to the resource and granting the request otherwise. Nevertheless, Kyler discloses the implementation of disk space quotas in which quotas limit on disk space taken up by files in the file system are established for users and directories, and an internal database is established to track quotas against actual disk space utilization (fig. 2, col. 3, lines 31 – 50, col. 2, lines 6 – 46). It would have been obvious for one of an ordinary skill in the art, at the time the invention was made, to incorporate Kyler's teaching together with Mounsey to ensure that there will always be adequate space available for system operations.

2. Regarding **claim 2**, as modified Mounsey discloses the step of entering a reduction mode for handling a subsequent request for allocation of the resource (Mounsey, 1<sup>st</sup> paragraph: Exceeding the hard limit results in immediate failure of all further file creation or expansion until usage has been reduced to an acceptable level).

3. Regarding **claim 5**, as modified Mounsey discloses the step of assigning the soft limit to the potential user (Mounsey, page 1: disk usage (soft): 10 mb).

4. Regarding **claim 7**, as modified Mounsey discloses the step of assigning the hard limit to the potential user (Mounsey, page 1: disk usage (hard): 11 mb).

5. Regarding **claim 9**, as modified Mounsey discloses the step of assigning the high watermark to the resource (Kyler, col. 2, lines 6 – 38: quota information).

6. **Claims 11 – 15, 18, 19 and 22 – 24** are rejected on the same ground as stated in claims 1, 2 and 5 above.

4. Claims 6, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephen Mounsey (“Disk Quotas”, University of Cambridge, Dept. of Engineer, October 9, 1997, hereinafter Mounsey) in view of Kyler et al. (US 6,092,163, hereinafter Kyler), as applied to claim 1 above, and in view of Harris et al. (US 6,438,704, hereinafter Harris).

7. Regarding **claims 6 and 8**, Mounsey and Kyler did not clear disclose the additional limitation as claimed. Nevertheless, Harris discloses the step of assigning the soft limit and/or hard limit in response to a class associated with the potential user (col. 4, line 45 – col. 5, line 32, col. 6, line 18 – 43, fig. 1, 2, 3a, 3c). It would have been obvious for one of an ordinary skill in the art, at the time the invention was made, to incorporate Harris’s teaching with the combination of Mounsey and Kyler so that resource can be assigned for utilization accordingly.

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8. Regarding **claim 10**, as modified Mounsey discloses the step of allocating a portion of the resource for system use (Harris: col. 2, lines 39 – 67, fig. 1 and 2, col. 4, line 45 – col. 5, line 32).

#### ***Allowable Subject Matter***

9. **Claims 3, 4, 16, 17, 20, 21, 25 and 26** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

10. Applicants' arguments filed on 9/21/04 with respect to claims 1, 2, 11 and 12 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is 571-272-3774. The examiner can normally be reached on Monday - Thursday, 7:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lilian Vo  
Examiner  
Art Unit 2127

lv  
December 10, 2004



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SUPERVISORY PATENT EXAMINER  
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